

IN THE CLAIMS

1. (Currently amended) A bias circuit comprising:
a reference cell to generate a bias signal; and
a first component coupled to the reference cell to adjust the bias signal by replicating
a thermal characteristic of a second component that may be coupled to the bias circuit[[]];
wherein the reference cell includes a feedback loop to drive a pair of ΔV_{BE} transistors;
and
wherein the first component is arranged in the feedback loop.
2. (Canceled)
3. (Original) A bias circuit according to claim 1 wherein the feedback loop
comprises a current mirror coupled between the first component and the reference cell.
4. (Original) A bias circuit according to claim 3 wherein the current mirror is
arranged to load the reference cell.
5. (Original) A bias circuit according to claim 1 wherein the first component
comprises a transistor.
6. (Canceled)
7. (Original) A bias circuit according to claim 1 wherein the reference cell and
the first component are coupled together at a summing node.
8. (Original) A bias circuit according to claim 1 further comprising a clamping
circuit coupled to the reference cell.
9. (Currently amended) A method comprising:
generating a bias signal with a reference cell having a feedback loop to drive a pair of
 ΔV_{BE} transistors; and
adjusting the bias signal by replicating a thermal characteristic of a component that
may be coupled to the bias circuit by operating a replica component in the feedback loop.

10. (Original) A method according to claim 9 wherein replicating the thermal characteristic comprises operating a replica component under similar operating conditions to the component that may be coupled to the bias circuit.

11. (Canceled)

12. (Currently amended) A method according to ~~claim 11~~ claim 9 wherein operating a replica component in a feedback loop comprises mirroring current through the replica component into the reference cell.

13. (Original) A method according to claim 9 wherein adjusting the bias signal comprises summing a current from a replica component with a current from the reference cell.

14. (Original) A method according to claim 9 further comprising clamping a voltage of the reference cell.

15. (Currently amended) A system comprising:
a first circuit comprising a reference cell to generate a bias signal, and a first component coupled to the reference cell; and
a second circuit coupled to the first circuit to receive the bias signal, the second circuit comprising a second component;
wherein the first component is arranged to adjust the bias signal by replicating a thermal characteristic of the second component[.];
wherein the reference cell includes a feedback loop to drive a pair of ΔV_{BE} transistors;
and
wherein the first component is arranged in the feedback loop.

16. (Canceled)

17. (Original) A system according to claim 15 wherein the feedback loop comprises a current mirror coupled between the first component and the reference cell.

18. (Original) A system according to claim 15 wherein the reference cell and the first component are coupled together at a summing node.

19. (Original) A system according to claim 15 wherein the first and second components have a matching thermal characteristic.

20. (Currently amended) A bias circuit comprising:
bias means for generating a bias signal, wherein the bias means comprises a feedback loop arranged to drive a pair of ΔV_{BE} transistors; and
replication means for replicating a thermal characteristic of a component that may be coupled to the bias circuit[[.]], wherein the replication means comprises a replication component that is matched to the component that may be coupled to the bias circuit;
wherein the replication component is arranged in the feedback loop.

21. (Canceled)

22. (Canceled)

23. (Original) A bias circuit according to claim 20 further comprising means for combining a signal from the bias means with a signal from the replication means.

24. (Original) A bias circuit according to claim 20 further comprising means for controlling the amount of compensation provided by the replication means.